# Does health insurance status influence the hospital length of stay for patients with asthma conditions?

# Naixin Zhang

**Objective**

Previous studies have demonstrated that nonclinical factors are associated with differences in clinical care, with uninsured patients receiving decreased resource use. Health care access, for such conditions as asthma is really important because lack of access leads to increased emergency department use, as well as what could be termed preventable hospitalizations[1]. Studies on trauma populations have also shown unclear relationships between insurance status and hospital length of stay (LOS). The objective of this project is to investigate the relationship between health insurance status and LOS with trauma conditions.

The Data used for this research has been obtained from healthdata.gov website. This data contains basic record level details regarding the discharge of inpatients in the State of New York in different health service areas in 2016.We used this dataset to compare differences in LOS with asthma conditions among three insurance groups: privately insured, publicly insured, and uninsured trauma patients. Hope this project can give the commercial insurance company or the government some reference to increase efficiency in the health care system, decrease costs.

General Comment:

I think the question itself is interesting. However, I am not sure the data would provide strong enough support for your research purpose. Separating insurance type by self/public/uninsured does not seem to be able to provide much insights for insurance company. These insurance types may not be really choices. Those being self-insured are unlikely qualified for public support program and may at the marge choose between insured or uninsured; Those under public support would never choose the other two (or may not be able to afford the commercial plan); those who are uninsured are simply not qualified for public ones and cannot afford the private ones. It may makes more sense to focus on different insurance within the category. You will need to figure out whether there exists differences among different programs within each type…

**Data description**

**data pre-processing**

**Methodology**

**Feature selection**

**classification method**

**Result**

**Conclusion and Future work**

**Reference**

[1] Holzmacher JL, Townsend K, Seavey C, et al. Association of Expanded Medicaid Coverage With Hospital Length of Stay After Injury. JAMA Surg. 2017;152(10):960–966. doi:10.1001/jamasurg.2017.1720